DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A58NM
Revision New
Airbus
A380-800
December 12, 2006

FAA TYPE CERTIFICATE DATA SHEET NO. A58NM

This data sheet which is part of Type Certificate No. A58NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the US Federal Aviation Regulations.

Type Certificate Holder

Airbus
1, Rond-Point Maurice Bellonte
31707 Blagnac
France

I. A380-800 Series Transport Category Airplanes

Model A380-841, Approved December 12, 2006
Model A380-842, Approved December 12, 2006

Engines

A380-841: Four Rolls Royce RB211 Trent 970-84 or RB211 Trent 970B-84 turbofan engines; Engine Type Certificate E00075EN
A380-842: Four Rolls Royce RB211 Trent 972-84 or RB211 Trent 972B-84 turbofan engines; Engine Type Certificate E00075EN

Fuel

Nomenclature	Specification				
	France	**U.S.A.**	**U.K.**	**Russia**	**China**
Kerosene	MDLD DCSEA 134/A Kerosene AIR-3404/C (JP5) MIL-DTL-5624T (JP5)	ASTM D-1655-00(a) (Jet A), (Jet A1) Dod MIL-DTL-83133E (JP8)	DEF STAN 91-91/3 AVTUR DEF STAN 91-87/2 AVTUR FSII DEF STAN 91-86/2 AVTUR FSII	RJFS0 GOST 10227-86, (RT)	PRC MPIS GB 6537-94 (No3 Jet Fuel)

Additives: See Rolls Royce Operating Instructions (OI-Trent-A380). The above-mentioned fuels are also suitable for the Auxiliary Power Unit.

Engine Limits

Engine Limitations (See FAA Data Sheet E00075EN)	**A380-841 RB211 Trent 970B-84**	**A380-842 RB211 Trent 972B-84**
Static Thrust at Sea Level - Take-off (5mn)[1] (flat rated 30°C)	348.31 kN or 78,303 lbf	356.81 kN or 80,214 lbf
Approved Oil	Refer to the Engine Operating Instructions (OI-Trent-A380) for information on approved oil specifications for the Trent 900	Refer to the Engine Operating Instructions (OI-Trent-A380) for information on approved oil specifications for the Trent 900

Table references:
(1) 10 minutes at take-off thrust allowed only in case of engine failure (at take-off or during go-around)

Other engine limitations: See the relevant Engine Type Certificate Data Sheet.

Airspeed Limits
Refer to the FAA approved Airbus Model A380-841 and A380-842 U.S. Airplane Flight Manuals.

Center of Gravity Limits
Refer to the FAA approved Airbus Model A380-841 and A380-842 U.S. Airplane Flight Manuals.

Datum
The airplane reference zero datum point is located 288.59 in. (7.3302 m) forward of the nose section, 257.59 in. (7.000 m) under the fuselage centerline (datum line).

Leveling Means
Inclinometer on cabin seat track rails (refer to AMM chapter 08.20.00).

Maximum Weights

Variant	000 Basic kg (lb)	001 kg (lb)	002 kg (lb)
Maximum Ramp Weight	562,000 (1,239,000)	512,000 (1,128,800)	571,000 (1,258,800)
Maximum Take-off Weight, MTOW	560,000 (1,234,600)	510,000 (1,124,400)	569,000 (1,254,400)
Maximum Landing Weight, MLW	386,000 (850,980)	394,000 (868,620)	391,000 (862,010)
Maximum Zero Fuel Weight, MZFW	361,000 (795,870)	372,000 (820,120)	366,000 (806,890)

Minimum Crew
Two (2): Pilot and Co-pilot

Maximum Passenger Seating Capacity
The maximum eligible passenger seating capacity is 538 on the main deck and 315 on the upper deck for a total of 853.

Maximum Compartment Weights

Cargo Compartment	Maximum Load (kg) or (lb)
Forward	28,577 Kg or 63,000 lb
Aft	20,310 Kg or 44,775 lb
Rear (bulk)	2,515 Kg or 5,540 lb

For the positions and the loading conditions authorized in each position (references of containers, pallets and associated weight) see Weight and Balance Manual, Airbus Document 00L080H0001/C0S, chapter 1.10.

Fuel Capacity

Tanks		Usable Fuel		Unusable Fuel	
		Liters (Kg)	Gallons (lb)	Liters (Kg)	Gallons (lb)
Wing	**Outer Left**	10,340 (8,272)	2,732 (18,237)	38 (30)	10 (66)
	Feed 1	27,632 (22,106)	7,302 (48,735)	82 (66)	22 (145.5)
	Mid Left	36,461 (29,169)	9,635 (64,307)	50 (40)	13.2 (88.2)
	Inner Left	46,142 (36,914)	12,193 (81,381)	70 (56)	18.5 (123.5)
	Feed 2	29,349 (23,479)	7,756 (51,762)	88 (70)	23.3 (154.3)
	Feed 3	29,349 (23,479)	7,756 (51,762)	88 (70)	23.3 (154.3)
	Inner Right	46,142 (36,914)	12,193 (81,381)	70 (56)	18.5 (123.5)
	Mid Right	36,461 (29,169)	9,635 (64,307)	50 (40)	13.2 (88.2)
	Feed 4	27,632 (22,106)	7,302 (48,735)	82 (66)	22 (145.5)
	Outer Right	10,340 (8,272)	2,732 (18,237)	38 (30)	10 (66)
Trim		23,698 (18,958)	6,262 (41,795)	49 (39)	13 (86)
Systems		793 (634)	210 (1398)	382 (305)	101 (672.4)
Total		324339 (259471)	85,707 (572,035)	1086 (869)	287 (1915.8)

Maximum Operating Altitude
43,000 feet

Control Surface Movements

INBOARD / MEDIAN / OUTBOARD AILERONS (surface deflection angles)		
	DOWN POSITION	UP POSITION
Maximum operational deflections (computer software limitations)	20°	-30°
Actuator stops (min/max)	23.6°/24.7°	-34.2°/-35.5°
Structural stops	> 25.7°	<-36.5°

SPOILERS 1 to 8 (extended positions			
	Spoilers 1 and 2	Spoilers 3 to 6	Spoilers 7 and 8
Maximum operational deflections (computer software limitations)	35°	50°	50°
Actuator stops (min/max)	39.6°/39.9°	52.7°/53.2°	53.7°/54.3°
Structural stops	>40.9°	>54.2°	>55.3

INBOARD / OUTBOARD ELEVATORS (surface deflection angles)		
	DOWN POSITION	UP POSITION
Maximum operational deflections (computer software limitations)	20°	-30°
Actuator stops (min/max)	22.8°/23.6°	-33.1°/-33.9°
Structural stops	> 24.6°	<-34.9°

THS (surface deflection angles)		
	NOSE UP	NOSE DOWN
Maximum operational deflections (computer software limitations)	-10°	2°
THSA stops	-10.44°/-10.56°	2.94°/3.06°
Interference between THS and the tail cone	-10.7°	3.3°

UPPER AND LOWER RUDDERS (surface deflection angles)		
	RH turn	LH turn
Maximum operational deflections (computer software limitations)	-30°	30°

Actuator stops (min/max)	-32.3°/-33.2°	32.3°/33.2°
Interference between the rudders and VTP	<-34.2°	>34.2°

Manufacturer's Serial Numbers

Import Requirements
To be considered eligible for operation in the United States, each aircraft manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English language): The [insert aircraft model and series] covered by this certificate conforms to the type design approved under U.S. Type Certificate No. A58NM, and is found to be in a condition for safe operation.

Certification Basis
14 CFR part 25, effective February 1, 1965, including Amendments 25-1 through 25-98, 25-101, 25-103 through 25-106, 25-108, 25-109, 25-113 and 25-114.

Special Conditions:

(1) No. 25-315-SC Discrete Gust Requirements
(2) No. 25-333-SC Transient Engine Failure Loads
(3) No. 25-321-SC Crashworthiness
(4) No. 25-322-SC Airplane Jacking Loads
(5) No. 25-326-SC Stairways Between Decks
(6) No. 25-327-SC Emergency Exit Arrangement (Outside Viewing)
(7) No. 25-330-SC Escape System Inflation System
(8) No. 25-329-SC Escape Systems in non-Pressurized compartments
(9) No. 25-323-SC Extendable-Length Escape Slides
(10) No. 25-328-SC Flotation and Ditching
(11) No. 25-340-SC Fire Protection
(12) No. 25-316-SC Dynamic Braking
(13) No. 25-324-SC Loading Conditions for Multi-Leg Landing Gear
(14) No. 25-316-SC Interaction of Systems and Structure
(15) No. 25-316-SC Limit Pilot Forces
(16) No. 25-316-SC Dive Speed Definition
(17) No. 25-338-SC Ground Turning Loads
(18) No. 25-318-SC Design Roll Maneuver
(19) No. 25-316-SC Flight Envelope Protection: High Incidence Protection and Alpha Floor Systems
(20) No. 25-316-SC Electronic Flight Control System: Control Surface Awareness
(21) No. 25-316-SC Flight Envelope Protection: General Limiting Requirements
(22) No. 25-316-SC Flight Envelope Protection: Normal Load Factor (G) Limiting
(23) No. 25-316-SC Flight Envelope Protection: High Speed Limiting
(24) No. 25-316-SC Flight Envelope Protection: Pitch and Roll Limiting
(25) No. 25-316-SC Side Stick Controllers
(26) No. 25-316-SC Electronic Flight Control System: Flight Characteristics Compliance via the Handling Qualities Rating Method
(27) No. 25-316-SC Operation Without Normal Electrical Power
(28) No. 25-316-SC Electronic Flight Control System: Lateral-Directional Stability, Longitudinal Stability, and Low Energy Awareness
(29) No. 25-316-SC High Intensity Radiated Fields (HIRF) Protection
(30) No. 25-335-SC Reinforced Bulkhead
(31) No. 25-339-SC Lithium-Ion Battery Installations

NOTE: The FAA Special Conditions referenced above may be accessed at internet location:
http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgSC.nsf/MainFrame?OpenFrameSet

Equivalent Level of Safety Findings:

(1) Section 25.629, Aeroelastic Stability Requirements (documented in TAD ELOS Memo CP101-A-5)
(2) Section 25.331(c)(2), Checked Maneuver Loads (documented in TAD ELOS Memo CP101-A-7)
(3) Sections 25.341(a)(i) and (b), 25.343(b)(1)(ii), 25.345(c)(2), 25.371, 25.373(a), 25.391 and 25.1517, Continuous Turbulence Loads (documented in TAD ELOS Memo CP101-A-09)
(4) Section 25.963(d), Fuel Tank Loads (documented in TAD ELOS Memo CP101-A-10)
(5) Section 25.963(e), Fuel Tank Access Covers (documented in TAD ELOS Memo CP101-A-11)
(6) Section 25.671(c)(2), Flight Control System Failure Criteria (documented in TAD ELOS Memo CP101-A-21)
(7) Section 25.810(a)(1)(ii) and (b), Escape System Inflation Time (documented in TAD ELOS Memo CP101-C-11)
(8) Section 25.107(e)(1)(iv), Reduced Margins between Minimum Liftoff Speed and Minimum Safe Flyaway Speed (documented in TAD ELOS Memo CP101-F-17)
(9) Section 25.933(a)(1)(ii), Flight Critical Thrust Reverser (documented in TAD ELOS Memo CP101-P-02)
(10) Part 25 subpart E, F and G requirements applicable to APU installations, Adoption of Draft Harmonized Rules for APU Certification (documented in TAD ELOS Memo CP101-P-05)
(11) Section 25.1305(c)(6), Trent 900 Warning Means for Engine Fuel Filter Contamination (documented in TAD ELOS Memo CP101-P-11)
(12) Section 25.1203(d), Trent 900 Overheat Detection (documented in TAD ELOS Memo CP101-P-13)
(13) Section 25.1549(a), Oil Temperature Indication (documented in TAD ELOS Memo CP101-P-15)
(14) Section 841(b)(1), Tests for Pressurized Cabins (documented in TAD ELOS Memo CP101-S-15)
(15) Section 831(g), Ventilation System Failures/Cabin Temperature and Humidity (documented in TAD ELOS Memo CP101-S-22)
(16) Section 25.1383(b), Landing Light Switches (documented in TAD ELOS Memo CP101-S-23)
(17) Section 25.841(b)(6), Cabin Pressurization – High Altitude Airfield Operations (documented in TAD ELOS Memo CP101-S-27)
(18) Section 25.865, APU Mounting System Fireproofness (documented in TAD ELOS Memo CP101-P-18)
(19) Section 25.1415(c), Ditching Equipment (documented in TAD ELOS Memo CP101-C-14)

NOTE: The FAA Equivalent Level of Safety Memos referenced above may be accessed at internet location:
http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgELOS.nsf/MainFrame?OpenFrameSet

Exemptions:

(1) Exemption No. 8538 for 14 CFR part 25 section 25.562(b)(2) Emergency Landing Dynamic Conditions
(2) Exemption No. 8695A (Partial) for 14 CFR part 25 section 25.841(a)(2)(i), (ii), and (3), per Amendment 25-87, Pressurized Cabins

NOTE: The FAA Exemptions referenced above may be accessed at internet location:
http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgEX.nsf/MainFrame?OpenFrameSet

Environmental Standards:

14 CFR part 34, effective September 10, 1990, including Amendments 34-1 through 34-3.
14 CFR part 36, effective December 1, 1969, including Amendments 36-1 through 36-27.

Optional Requirements Elected:

(1) Sections 25.801, 25.1411 and 25.1415 for ditching
(2) Section 25.1419 for ice protection

Special Federal Aviation Regulation (SFAR):

SFAR Number 88, effective June 6, 2001, including Amendments 21-78, 21-82 and 21-83.

Production Basis

A380 airplanes, all series and models, are produced in France under production approval FR.21G.0035 issued by DGAC or produced in Germany under production approval DE.21G.0009 issued by LBA to Airbus.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see the Certification Basis) must be installed in the aircraft. Equipment approved for installation is listed in the following documents:

- See A380-841/-842 Type design definition

Cabin furnishings, equipment and arrangement must conform to the following specification:
- 00L252K0005/C01 for cabin seats,
- 00L252K0006/C01 for galleys,
- 00L252K0020/C01 for cabin attendant seats.

Hydraulic Fluids
Fluid specifications: Type IV and Type V as per NSA 307-110.

Auxiliary Power Unit (APU)
One Pratt & Whitney Canada PW980A

Tires

	Tire Type	**Size**	**Ply Rating**
BLG & WLG:	RADIAL	1400x530 R23	40PR
NLG:	RADIAL	1270x455 R22	32PR

The main wheels can be fitted with tires from two manufacturers:

Michelin (Radial); 1400 x 530 R23
Bridgestone (Radial); 1400 x 530 R23

No mixing of Tires is permitted at present

The nose wheels can be fitted with tires from two manufacturers:

Michelin (Radial) 1270 x 455 R22
Bridgestone (Radial) 1270 x 455 R22

Tire Loads and Pressures

	LOAD RATING	RATED PRESSURE		Service Pressure UNLOADED		Service Pressure LOADED	
		bar	PSI	bar	PSI	bar	PSI
WLG & BLG Tyre	33336 daN	17.2	249	14.4	209	15.0	218
NLG Tyre	24380 daN	16.2	235	13.3	193	13.9	202

Weather Capabilities
The Model A380-800 is qualified to Cat. 1.

Airplane Flight Manual
Refer to A380-841 and A380-842 US Airplane Flight Manuals, Revision 0.3, Issue 1, both dated December 7, 2006, applicable to A380-841 and A380-842 airplanes.

Service Information
- Airbus service and repair instructions (inspection bulletins, letters, etc...), structural repair manual, aircraft flight manual, and overhaul and maintenance manuals which contain a statement that the document is EASA approved are accepted by the FAA and are considered as FAA approved. Airbus modification Service Bulletins which contain a design change classified as Level 2 Major or Minor in accordance with the US/France Implementation Procedures, and have been approved by the EASA or by the

authority of an EASA Design Organization Approval are considered FAA approved. These approvals pertain to the type design only.

- Airbus modification Service Bulletins which contain a design change classified as Level 1 Major in accordance with the US/France Implementation Procedures, must be approved by the FAA as specified in these Implementation Procedures for changes to a type certificate.

- US/France Implementation Procedures refers to the document titled: "Implementation Procedures for Design Approval, Production Activities, Export Airworthiness Approval, Post Design Approval Activities, and Technical Assistance Between Authorities, under the agreement between the governments of the US and France," dated August 24, 2001. The relevant section for this note is 3.3.1 "Design Changes," sub section 3.3.1.0, "Approval Procedures for Changes to a Type certificate by the Type Certificate Holder."

- EASA Design Organization Approvals refer to approvals made under the authority of Airbus Design Organization Approval No. EASA 21J.031 (from September 2004).

Notes:

Note 1: A current weight and balance report including list of the equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter.

Note 2: Airplane operation must be in accordance with the FAA approved Airplane Flight Manual. All placards required by either the FAA approved AFM, the applicable operating rules, or the certification basis must be installed in the airplane.

Note 3: Maintenance Instructions and Airworthiness Limitations:

- Limitations applicable to Safe Life Airworthiness Limitation Items are provided in the A380 Airworthiness Limitations Section 1 approved by EASA (Document 00L050H0007/C01)

- Limitations applicable to Damage-Tolerant Airworthiness Limitation Items are provided in the A380 Airworthiness Limitations Section (ALS) Section 2 approved by EASA (Document 00L050H0005/C01)

- Certification Maintenance Requirements are provided in the A380 Airworthiness Limitations Section (ALS) Section 3 approved by EASA (Document 00L050H0002/C01)

- A380- 800 Ageing System Maintenance are provided in the A380 Airworthiness Limitations Section (ALS) Section 4 approved by EASA (Document 00 L 050 H 0010 / C01)

- A380- 800 Fuel Airworthiness Limitations are provided in the A380 Airworthiness Limitations Section (ALS) Section 5 approved by EASA (Document 00 L 050 H 0009 / C01)

- Maintenance Review Board Report 00L050H0001/C01

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